

**16:53-3.16 Chassis and body construction**

(a) The chassis and body, or the complete autobus unit, shall be so designed and constructed that it will properly and safely support the gross weight of the autobus, including the maximum passenger capacity thereof.

(b) Axles, springs, tires, and suspension assemblies shall be of sufficient capacity to support the manufacturer's maximum GVWR.

(c) The GVWR certified by the manufacturer and the gross vehicle axle weight shall be set forth on a data plate that is affixed to the autobus in a location that is readily visible for inspection. At no time shall the GVWR be exceeded.

(d) The body shall be mounted on an appropriate chassis and shall be free of sharp or jagged edges.

As amended, R.1983 d.110, eff. May 2, 1983.

See: 14 N.J.R. 1347(a), 15 N.J.R. 694(b).

Recodified section.

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

Rewrote (a) and (b); added (c) and (d).

**16:53-3.17 Relation of body and chassis frame**

(a) The body shall not extend more than 18 inches beyond the rear of the main frame supporting the body.

(b) An extension may be installed at the rear end of the original chassis frame by the chassis manufacturer or by others provided that a certification of approval has been issued by the original chassis manufacturer. Such certification shall contain a detailed description of the extension.

As amended, R.1983 d.110, eff. May 2, 1983.

See: 14 N.J.R. 1347(a), 15 N.J.R. 694(b).

Body frame extension changed from "15" inches to "18" inches. Old (b) deleted and new language substituted therefor.

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

Rewrote (b).

**16:53-3.18 Overhang of body**

(a) The maximum overhang of the body to the rear of the rear axle shall not exceed one-third of the total length of the autobus.

(b) Vehicle measurements shall be taken from the extreme front to the extreme rear of the vehicle, not including the bumpers.

(c) Overhang measurements shall be taken from the center of a load-bearing axle to the extreme rear end of the autobus, not including the rear bumper.

As amended, R.1983 d.110, eff. May 2, 1983.

See: 14 N.J.R. 347(a), 15 N.J.R. 694(b).

Section recodified.

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

Rewrote the section.

**16:53-3.19 Bumpers**

(a) Each autobus shall be equipped with a front and rear bumper of sufficient size and strength attached to the main frame supporting the body and extending the full width of the body.

(b) The rear bumper shall extend at least four inches beyond the body limits and be shielded on the top to prevent toehold, except on an autobus constructed with its engine attached to the extreme rear end of the chassis frame or one having a similarly sized compartment between the extreme rear of the bus body and rear seat in the passenger compartment.

As amended, R.1983 d.110, eff. May 2, 1983.

See: 14 N.J.R. 1347(a), 15 N.J.R. 694(b).

(b) Deleted the language " , except on autobuses . . . in the passenger compartment."

Amended by R.1983 d.399, effective October 6, 1986.

See: 18 N.J.R. 1519(b), 18 N.J.R. 2058(c).

Added text "except on an . . . the passenger compartment."

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

Rewrote (a).

**16:53-3.20 Brakes**

(a) Every autobus shall be equipped with two independent brake systems. Service brakes shall operate on all wheels and shall be capable of bringing the autobus to a stop of 22.5 feet or less from a speed of 20 miles per hour.

(b) The emergency brake shall be capable of bringing the autobus to a stop within 75 feet or less from a speed of 20 miles per hour.

1. The emergency brake shall be activated and capable of stopping and holding the autobus if the main system supply to the service brake falls below a safe operating level. Upon application of the emergency brake, it shall remain on, though the source of energy for its application may be eliminated.

2. When the emergency brake is activated by the loss of the system to the main service brakes, the driver, without leaving his or her seat, shall be able to override the emergency brake a minimum of three times. The control to operate the override shall be of a "dead man" type, necessitating constant driver effort to use. All autobuses manufactured after March 1975 and equipped with an air brake system shall comply with Federal Motor Vehicle Safety Standard No. 121 (49 CFR § 571.121), incorporated herein by reference, as amended and supplemented, pertaining to split system and emergency application.

3. Any system source to activate the emergency brake shall be separate and independent of the main service brake system supply source.

4. If an autobus is equipped with a mechanical parking brake, such parking brake shall be constructed and maintained to hold the autobus in a stopped position with the transmission in a forward gear while the parking brake is applied.

(c) Brake stopping distances shall be measured by means of an instrument or machine of the decelerometer-type capable of being read in feet.

1. Each autobus shall meet the brake stop test requirement on an approved decelerometer that has been calibrated for accuracy.

2. Brake stop test equipment shall be owned by the operator, or arrangements shall be made for its use by the operator, or such equipment shall be provided to the operator by others, or the operator may choose to have such testing performed by the New Jersey Department of Transportation for the fee set forth in N.J.A.C. 16:53-10.2.

3. The brake stop test shall be performed within 20 days prior to self-inspection certification.

(d) Brake systems actuated by compressed air pressure or vacuum power shall be constructed to afford the following results:

1. Compressed air brake systems shall be equipped with an air compressor of sufficient size to fully charge the reservoir to its rated operating pressure in three minutes or less.

2. Reservoir capacity shall be sufficient to maintain 60 pounds per square inch after four full brake applications. This shall be accomplished with the engine and compressor shut down and the parking brake released.

3. Compressed air reservoir systems shall be equipped with a safety valve that shall vent to the atmosphere. The safety valve setting shall not be in excess of 1( times the maximum air compressor governed pressure setting.

4. Vacuum reservoirs shall have a volume of not less than 1,000 cubic inches and shall be used for braking purposes only.

5. Vacuum brake systems shall develop a minimum of 14 inches of reservoir vacuum within the following times:

i. Intake manifold of engine, one minute; and

(e) Brake systems shall be equipped with an air pressure or vacuum gauge, indicating pounds per square inch or inches of mercury, located in clear view of the driver and illuminated during the period when lighted lamps are required.

(f) Autobuses equipped with brake systems actuated by compressed air shall be equipped with an audible or visible signal within hearing or full view of the driver to indicate that air pressure is at least one-half of the compressor governor cut-out pressure. Autobuses equipped with brake systems actuated by vacuum power shall be equipped with an audible or visible signal within hearing or full view of the driver whenever the vacuum in the vehicle's supply reservoir is less than eight inches of mercury.

(g) Hydraulic system service (foot) brakes shall be of a dual-type, split to the front and rear wheels and each section separately actuated and shall meet the requirements of Federal Motor Vehicle Safety Standard No. 105 (49 CFR § 571.105), incorporated herein by reference, as amended and supplemented.

(h) Brake drums and rotors shall be permanently and plainly marked and shall clearly indicate the maximum safe diameter of the drum or the minimum safe thickness of the rotor as determined by the manufacturer of the drum or rotor. A drum or rotor worn beyond the maximum safe diameter or minimum safe thickness as prescribed by industry standards shall be discarded.

(i) Brake linings and pads shall meet the manufacturer's specifications for minimum thickness.

As amended, R.1983 d.110, effective May 2, 1983.

See: 14 N.J.R. 1347(a), 15 N.J.R. 694(b).

Section substantially amended.

Amended by R.1989 d.392, effective July 17, 1989.

See: 21 N.J.R. 1098(a), 21 N.J.R. 2051(b).

At (c) added 1.-4. requirements of brake stop and brake stop testing; at (e) added inches of mercury as acceptable measure.

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

Rewrote the section.

### 16:53-3.21 Equipment unit

(a) Only single-unit, including articulated, autobus equipment with the motive power and the passenger compartment mounted on such unit shall be permitted.

(b) Trailers shall not be permitted to be attached to an autobus used for the transportation of passengers.

As amended, R.1983 d.110, effective May 2, 1983.

See: 14 N.J.R. 1347(a), 15 N.J.R. 694(b).

Added (a): "including articulated". Added (b).

Amended by R.2002 d.295, effective September 3, 2002.

See: 34 N.J.R. 1327(b), 34 N.J.R. 3099(a).

In (b), substituted "for" for "in" and "transportation" for "transporting".

### 16:53-3.22 Identification

(a) An autobus shall not be operated unless it displays on each side of its exterior the exact name of the operator in clearly visible letters at least three inches high and of a sharply contrasting color from the background.